

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-11 (canceled).

12. (currently amended) Disc brake pad comprising at least one brake lining and a carrier-plate to which the at least one brake lining is affixed over a first surface of the at least one brake lining, the carrier-plate extending beyond the brake lining in at least one of length and width, the at least one brake lining having a planar friction surface opposite to the first surface which is constructed and arranged to come into frictional contact with one face of a disc,

the brake pad being provided with a heat dissipating structure which directs a heat flux to be dissipated in at least one direction substantially parallel to the planar friction surface, the heat dissipating structure being formed in at least one of the at least one brake lining and the carrier-plate at an interface between the at least one brake lining and the carrier-plate,

wherein at least one of the at least one brake lining and the carrier-plate comprises grooves that form holes having axes along directions substantially parallel to the planar friction surface, the holes being through holes open at ends thereof.

13. (currently amended) Disc brake pad according to claim 12, wherein said heat dissipating structure is formed in at least one of said at least one brake lining and said carrier-plate, at the interface between the at least one brake lining and the carrier-plate therebetween.

14. (currently amended) Disc brake pad according to claim 13 12, wherein at least one of the at least one brake lining and the carrier-plate comprises grooves that form holes having

~~axes along directions substantially parallel to the planar friction surface, the holes being are through holes open at ends thereof, and through which air can pass freely.~~

15. (currently amended) Disc brake pad according to claim ~~14~~ 12, wherein the axes of the holes are parallel to a given direction which corresponds to a direction of moving air close to said pad.

16. (previously presented) Disc brake pad according to claim 12, wherein the heat dissipating structure comprises peripheral projections around the carrier plate, the projections being provided with cooling fins.

17. (previously presented) Disc brake pad according to claim 12, wherein said heat dissipating structure comprises bars made of a material which conducts heat better than the lining or the carrier-plate in which the bars are placed.

18. (currently amended) Disc brake pad according to claim 17, wherein the bars are disposed in the ~~housings formed by~~ holes ~~formed at the interface of the lining and the carrier plate.~~

19. (previously presented) Disc brake pad according to claim 17, wherein the bars are hollow and permit air to pass freely therethrough.

20. (previously presented) Disc brake pad according to claim 18, wherein the bars have a length greater than the housings.

21. (previously presented) Disc brake pad according to claim 20, wherein the bars are provided with projections in the form of cooling fins which provide an increased exchange surface.

22. (previously presented) Disc brake pad according to claim 12, wherein the carrier plate comprises through holes in an area which extends beyond the brake lining.

23. (previously presented) Disc brake pad according to claim 12, wherein the carrier plate is made of metal and is attached to the brake lining by brazing or machining.

24. (previously presented) Disc brake pad according to claim 23, wherein the carrier-plate is made of steel.

25. (previously presented) Disc brake pad according to claim 12, wherein the brake lining is made of a material selected from the group consisting of:

an organic mixture comprising graphite, ceramic powder and metallic chips bonded by a resin;

a sintered mixture comprising graphite, metal and ceramic powder; and

a carbon/carbon composite material.

26. (previously presented) Disc brake pad according to claim 12, additionally comprising a heat shield disposed over a surface of the carrier plate opposite to the at least one brake lining.

27. (previously presented) Disc brake pad according to claim 26, wherein the heat shield is formed from sheet metal.